

# 60A193C Datasheet



DiGi Electronics Part Number	60A193C-DG
Manufacturer	<a href="#">Murata Power Solutions Inc.</a>
Manufacturer Product Number	60A193C
Description	FIXED IND 19.4UH 8.5A 11MOHM SMD
Detailed Description	19.4 $\mu$ H Unshielded Wirewound Inductor 8.5 A 11m Ohm Max Nonstandard



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## Purchase and inquiry

**Manufacturer Product Number:**

60A193C

**Series:**

6000A

**Type:**

Wirewound

**Inductance:**19.4  $\mu$ H**Current Rating (Amps):**

8.5 A

**Shielding:**

Unshielded

**Q @ Freq:**

-

**Ratings:**

-

**Inductance Frequency - Test:**

100 kHz

**Package / Case:**

Nonstandard

**Size / Dimension:**

0.866" L x 0.748" W (22.00mm x 19.00mm)

**Base Product Number:**

60A

**Manufacturer:**

Murata Power Solutions Inc.

**Product Status:**

Active

**Material - Core:**

-

**Tolerance:** $\pm$ 10%**Current - Saturation (Isat):**

12A

**DC Resistance (DCR):**

11mOhm Max

**Frequency - Self Resonant:**

15MHz

**Operating Temperature:**

-40°C ~ 85°C

**Mounting Type:**

Surface Mount

**Supplier Device Package:**

-

**Height - Seated (Max):**

0.472" (12.00mm)

## Environmental & Export classification

**RoHS Status:**

ROHS3 Compliant

**REACH Status:**

REACH Unaffected

**HTSUS:**

8504.50.4000

**Moisture Sensitivity Level (MSL):**

1 (Unlimited)

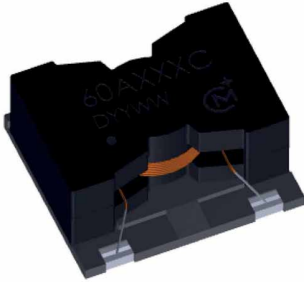
**ECCN:**

EAR99



# 6000A Series

Surface Mount Power Inductors



## FEATURES

- RoHS compliant<sup>1</sup>
- Up to 22A saturation current
- 5.8μH to 57.8μH
- High energy storage, low resistance
- UL 94V-0 packaging materials
- J-STD-020D.1 reflow
- Custom inductance values available

## PRODUCT OVERVIEW

The 6000A series is a range of high-current, surface-mount power inductors. They are designed for use in power applications such as DC-DC converters, energy storage and input or output filtering. The products are supplied in tape and reel for high-volume, automated surface-mount assembly.

## SELECTION GUIDE

Order Code	Inductance, L	Isat <sup>4</sup>	DC Current <sup>2</sup>	SRF	DC Resistance
	0.1V@100KHz (±10%) μH	Max. A	Max. A	Typ. MHz	Max. mΩ
60A582C	5.8	22	14.5	31	5
60A782C	7.8	19	13.5	26	6
60A103C	10.2	17	12.0	21	7
60A163C	16.0	13	9.6	17	9
60A193C	19.4	12	8.5	15	11
60A233C	23.0	11	8.4	13	12
60A273C	27.0	10	7.5	13	15
60A313C	31.4	9.5	6.8	12	18
60A363C	36.0	8.8	6.4	11	20
60A413C	41.0	8.4	5.6	10	26
60A583C	57.8	6.2	4.9	8	36

## ABSOLUTE MAXIMUM RATINGS

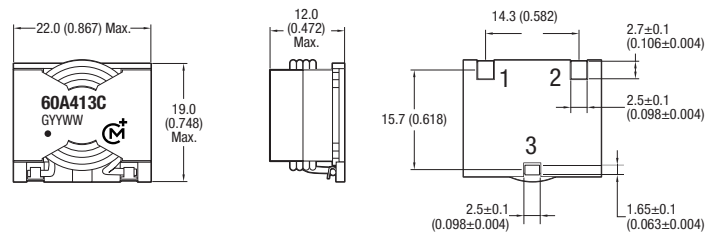
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 150°C

## SOLDERING INFORMATION<sup>1</sup>

Peak reflow solder temperature	245°C
Pin finish	Pure tin
Moisture sensitivity level <sup>3</sup>	1

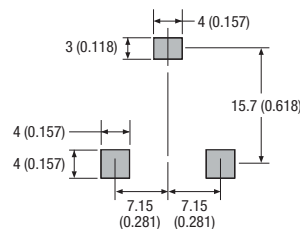
## PACKAGE SPECIFICATIONS

### Mechanical Dimensions<sup>5</sup>



Package weight: 12.7g Typ.

### Recommended Pad Layout



All dimensions in mm (inches)

Specifications typical at  $T_a = 25^\circ\text{C}$

1 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

3 Representative samples of the product were subjected to the conditioning described in IPC/JEDEC J-STD-020D and passed electrical testing, package coplanarity and visual inspection which revealed no external cracks or changes in package body flatness.

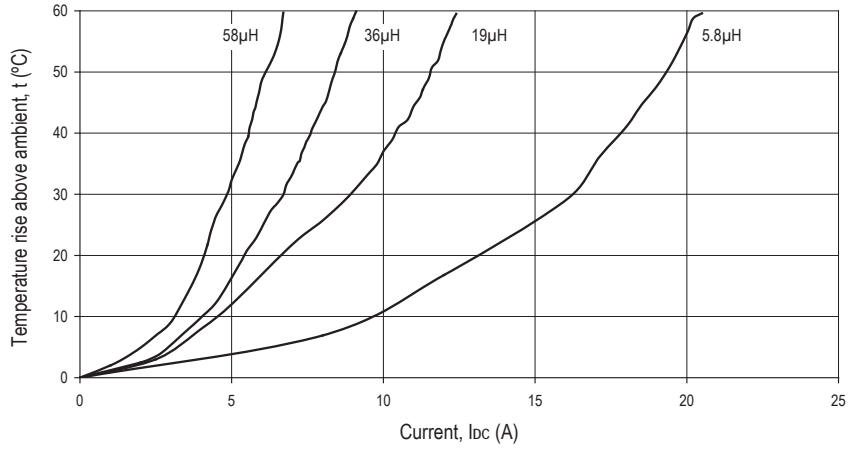
4 The instantaneous value when inductance drops to 80% of its normal value.

5 Terminal 3 is open-circuit and for mounting stability only.

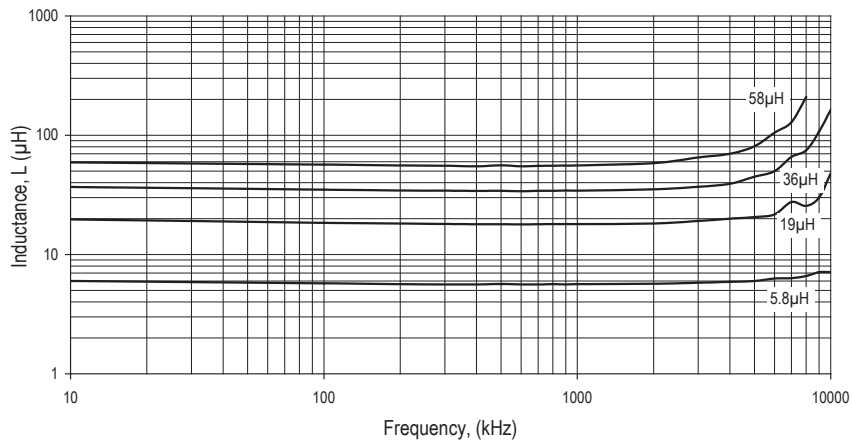


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

**TEMPERATURE Vs CURRENT**

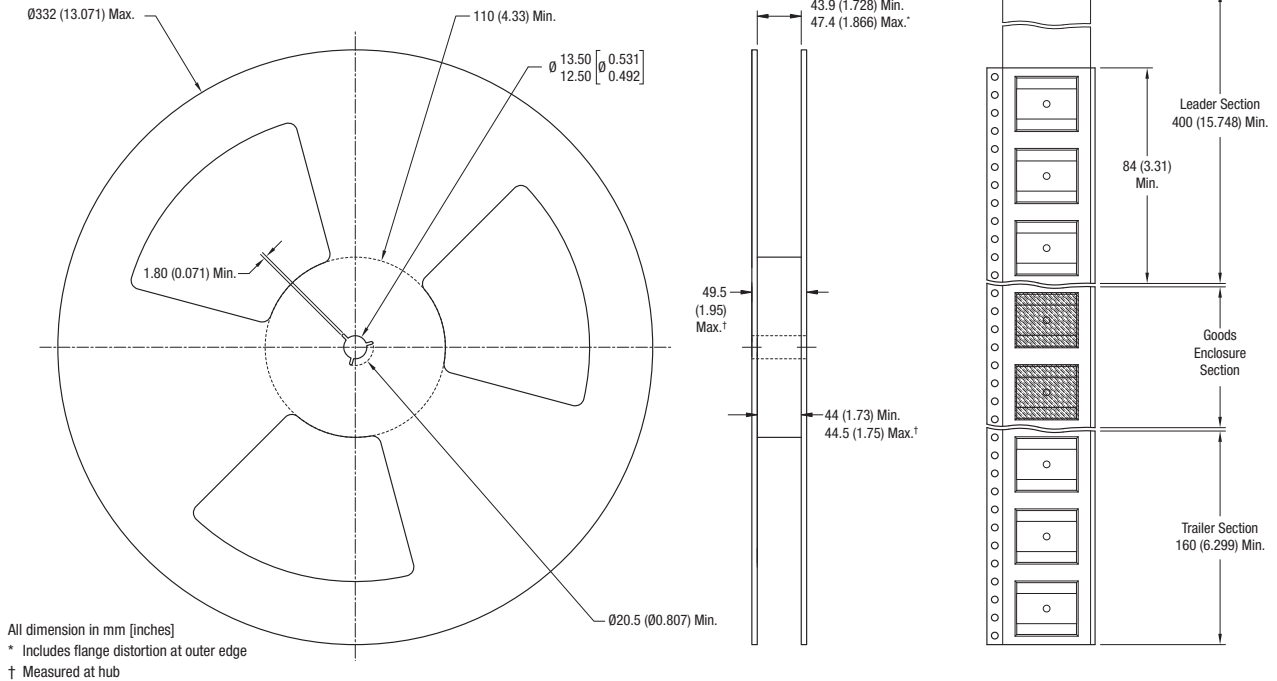


**INDUCTANCE Vs FREQUENCY**

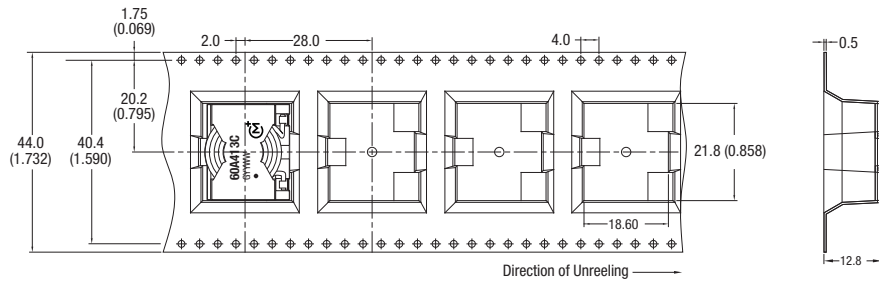


**PACKAGE SPECIFICATIONS**

**Mechanical Dimensions**



**Tape Outline Dimensions**



Reel quantity: 200  
 Unless otherwise stated, all dimensions in mm (inches).

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